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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,403	02/27/2002	Keiichi Nakada	381AS/50981	7379

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Crowell & Moring LLP
The Evenson, McKeown, Edwards & Lenahan
Intellectual Property Law Gr.
1001 Pennsylvania Avenue, N.W.
Washington, DC 20004-2595

EXAMINER

DICKENS, CHARLENE

ART UNIT PAPER NUMBER

2855

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,403

Applicant(s)

NAKADA ET AL.

Examiner

Ex. Dickens

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/3/03 & 7/15/03.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. Claim 11 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 8.

2. Applicant's election with traverse of group I in Paper No. is acknowledged. The traversal is on the ground(s) that the flow rate measuring device forming the subject matter of claims 1-10 is "capable of use" together with the internal combustion engine control system forming the subject matter of claim 11. This is not found persuasive because the two inventions are in different classes. A search of Group I, class 73, subclass 202.5 does not require searching Group II, class 123, subclass 205. Similarly, a search of class 123, subclass 205 would not require a search of class 73, subclass 202.5. Thus, a search of the two inventions would constitute an unnecessary burden to the Office.

The requirement is still deemed proper and is therefore made FINAL.

3. This application contains claim 11 drawn to an invention nonelected with traverse in Paper No. 8. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

4. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 3/3/03 have been approved by the Examiner. A proper drawing correction or corrected

drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US Pat 5,892,146) in view of Igarashi et al. (US Pat 5,631,415). As best understood, Kobayashi et al. discloses a flow rate measuring device comprising: a sub-passage 10 installed in a main passage 20 through which a fluid flows; and a detection element 52 installed in the sub-passage and capable of measuring a flow rate of a gas flowing in a forward direction 23 and a flow rate of a gas flowing in a backward direction 24; wherein the sub-passage having an outlet opening 12 in a radial direction of the main passage and a bent portion at least upstream of the detection element; wherein capability is provided near the outlet of the sub-passage to introduce the backward flow of the main passage into the sub-passage through the outlet (col. 2, lines 1-6); wherein introduction of the backward flow into the sub-passage

through the outlet by a dynamic pressure generated by the backward flow by introduction means; and wherein the sub-passage has the bent portion between the outlet and the detection element. However, Kobayashi et al. does not specifically disclose a sub-passage having a structure of a stepped portion formed of various configurations. Igarashi et al. discloses a sub-passage having a structure of a stepped portion formed of various configurations (Figs. 1, 3, 4, 6, 7, 9-13, 15-18, 20, 22, 24, 25) for the purpose of providing an air flow rate measuring device in which particular configurations develops the highest flow velocity in central portion of the main air passage. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a sub-passage having a structure of a stepped portion formed of various configurations in Kobayashi et al. as taught by Igarashi et al. for the purpose of providing an air flow rate measuring device in which particular configurations develops the highest flow velocity in central portion of the main air passage.

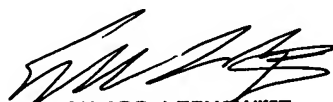
7. Applicants' arguments filed 3/3/03 have been fully considered but they are not persuasive. Applicants argue Kobayashi et al. does not have means for detecting a direction of air flow. The Examiner disagrees with this. Fig. 1 clearly illustrate air flow in forward and backward directions. Figs. 4B & 5A-6 clearly depict back flow conditions. Also, col. 5, lines .

35-55 explains the effects of back flow and how to reduce the jump-up error. The modified Kobayashi et al. clearly suggests the claim invention. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dickens or the supervisor, Edward Lefkowitz, whose telephone numbers are (703) 305-7047 or 305-4816, respectively.



cd/dickens
November 24, 2003



EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800